# STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES

### GENERAL PERMIT NCG530000

to discharge from seafood packing and rinsing, aquatic animal operations, and similarly designated wastewaters under the

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

in compliance with the provisions of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission and the Federal Water Pollution Control Act, as amended, this permit is hereby issued to all owners or operators, hereafter Permittees, covered by this permit as evidenced by receipt of a Certificate of Coverage (COC) issued by the Environmental Management Commission to allow the discharge of wastewater in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III and IV hereof.

This permit shall become effective **XXXX**, 2021.

This permit shall expire at midnight on **XXXX**, 2026.

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S. Daniel Smith
Director, Division of Water Resources
By Authority of the Environmental Management Commission

#### **PART I**

#### MONITORING, CONTROLS, AND LIMITATIONS FOR PERMITTED DISCHARGES

# SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR COLD WATER SPECIES

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

Cold water species are defined as, but not limited to, the *Salmonidae* fish family. During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from outfalls numbered serially beginning with 001. Such discharges shall be limited and monitored by the Permittee as specified below:

	LIMITS		MONITORING REQUIREMENTS			
EFFLUENT CHARACTERISTICS <sup>1</sup>	Monthly Average	Daily Maximum	Measurement Frequency <sup>1</sup>	Sample Type	Sample Location	
Feed Rate (lbs / day)			Daily	Measured	N/A	
Feed Rate (% / day) <sup>2</sup>			Daily	Calculated	N/A	
Receiving stream condition <sup>3</sup>			Weekly	Visual observation	100 ft downstream reach	
Flow (MGD) <sup>4</sup>			Quarterly	Instantaneous	Effluent	
Temperature (°C)			Quarterly	Grab	Influent and Effluent	
Settleable Solids	5.0 ml/L	10.0 ml/L	Quarterly 8	Composite <sup>4</sup>	Effluent	
Total Suspended Solids (mg/L) 5,6	30.0 mg/L	60.0 mg/L	Quarterly 8	Composite <sup>4</sup>	Effluent	
Total Ammonia Nitrogen (mg/L)			Quarterly 8	Composite <sup>4</sup>	Influent and Effluent	
Dissolved Oxygen (mg/L) 7			Quarterly 8	Grab	Effluent	
Turbidity (NTU) 8			Quarterly 8	Grab	Effluent	

#### **Footnotes:**

- 1. Additional monitoring requirements may be required if the facility discharges to 303(d) listed receiving waters.
- 2. The feed rate shall be reported as the ratio of feed weight per day to animal weight (biomass). See Appendix A for more information regarding feed conversion ratios.
- 3. See Part I Section A. General Condition G.
- 4. Flow rate shall be estimated within 1-hour of collecting the effluent sample.
- 5. Composite samples must consist of four (4) or more discrete samples taken at one hour intervals or greater in a 24-hour period. Samples are to be collected once per quarter (January-March, April-June, July-September, October-December). The sample taken during July-September shall be collected during feeding, harvesting, and cleaning (denote activity on sampling logs).

- Facilities with multiple effluent discharge points and/or influent points must composite samples from all points.
- 6. If the Permittee discharges to a stream classified as High Quality Waters (HQW), the Daily Maximum limit for Total Suspended Solids shall not exceed 20.0 mg/L. If the discharge is to waters classified as Trout (Tr), the Daily Maximum limit for Total Suspended Solids shall not exceed 10.0 mg/L [see Certificate of Coverage (COC) cover letter for receiving-stream classification].
- 7. Daily Average effluent concentration of Dissolved Oxygen shall not fall below 6.0 mg/L.
- 8. Turbidity will not be limited except for facilities that discharge to a receiving stream which is impaired for turbidity (10 NTU for trout waters, 25 NTU for saltwaters as well as lakes and reservoirs not designated as trout waters, 50 NTU for freshwaters). The discharge from this facility shall not cause turbidity in the receiving stream to exceed the appropriate NTU. If the instream turbidity exceeds the appropriate NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream.
- 9. See Part I Section A. General Condition H. for compliance schedule.

#### **General Conditions:**

- a. Although annual reporting to the Division is not required, routine records maintenance (see Part I Section F) is required. Each item including laboratory monitoring data is to be kept onsite for a minimum three (3) years, available for inspection upon request by the Division.
- b. Effluent pH for classified freshwater shall not fall below 6.0 s.u. nor exceed 9.0 s.u.
- c. Effluent pH for classified saltwater shall not fall below 6.8 s.u. nor exceed 8.5 s.u.
- d. The Permittee shall discharge no floating solids or foam.
- e. CAAP facilities discharging to a waterbody classified Nutrient Sensitive Waters (NSW) shall use low-phosphorus food [see Certificate of Coverage for receiving-stream classification].
- f. No fish/seafood offal or fish/seafood carcasses shall discharge from any facility covered by this General Permit.
- g. Weekly, a downstream reach of the receiving stream shall be visually inspected from the discharge point to no less than 100 feet downstream. The stream shall be visually inspected for the presence of solids, foam, sheen, algal growth, excessive aquatic vegetation, sewage worms or other indicators of pollution. Visual observations are to be recorded and retained onsite for a minimum of three (3) years. Any presence of the aforementioned conditions is required to be reported to the Division of Water Resources within 24 hours of observing (see Part I Section F).
- h. Sampling for Settleable Solids, Total Suspended Solids, Total Ammonia Nitrogen, Dissolved Oxygen, and Turbidity shall be conducted on an Annual basis for the first two (2) years of the general permit, and on a quarterly basis for the remaining three (3) years of the general permit. New Certificates of Coverage (CoCs) issued during the permit cycle shall perform quarterly sampling upon issuance of the CoC.

**NOTE:** Special Condition - Section F: This Certificate of Coverage (COC) requires the Permittee to submit to the Division a written plan addressing Operation and Maintenance Best Management Practices (BMPs) in accord with Part I Section F. of this permit. Compliance with Section F shall commence on the anniversary of the effective date, one (1) year from the issuance of the COC.

# SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR WARM WATER SPECIES

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

Warm water species are defined as, but not limited to, the *Ameiuride, Centrarchidae*, and *Cyprinidae* fish families. During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from outfalls numbered serially beginning with 001. Such discharges shall be limited and monitored by the Permittee as specified below:

	LIM	ITS	MONITORING REQUIREMENTS			
EFFLUENT CHARACTERISTICS	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location	
Flow (MGD)			Quarterly	Estimate	Effluent	
Total Suspended Solids (mg/L) 1	30.0 mg/L	60.0 mg/L <sup>1</sup>	Quarterly 4	Grab	Effluent	
Settleable Solids (mg/L)	5.0 ml/L	10.0 ml/L	Quarterly 4	Grab	Effluent	
Dissolved Oxygen (mg/L) <sup>2</sup>			Quarterly 4	Grab	Effluent	
Turbidity (NTU) <sup>3</sup>			Quarterly 4	Grab	Effluent	

#### **Footnotes:**

- 1. If the Permittee discharges to a stream classified as High Quality Waters (HQW), the Daily Maximum limit for Total Suspended Solids shall not exceed 20.0 mg/L. If the discharge is to waters classified as Trout (Tr), the Daily Maximum limit for Total Suspended Solids shall not exceed 10.0 mg/L [see Certificate of Coverage (COC) cover letter for receiving-stream classification].
- 2. Daily Average effluent concentration of Dissolved Oxygen shall not fall below 6.0 mg/L.
- 3. Turbidity will not be limited except for facilities that discharge to a receiving stream which is impaired for turbidity (10 NTU for trout waters, 25 NTU for saltwaters as well as lakes and reservoirs not designated as trout waters, 50 NTU for freshwaters). The discharge from this facility shall not cause turbidity in the receiving stream to exceed the appropriate NTU. If the instream turbidity exceeds the appropriate NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream.
- 4. See Part I Section A. General Condition H. for compliance schedule.

#### **General Conditions:**

- a. Although annual reporting to the Division is not required, routine records maintenance (see Section F) is required. Each item including laboratory monitoring data is to be kept onsite for a minimum three (3) years, available for inspection upon request by the Division.
- b. Effluent pH for classified freshwater shall not fall below 6.0 s.u. nor exceed 9.0 s.u.
- c. Effluent pH for classified saltwater shall not fall below 6.8 s.u. nor exceed 8.5 s.u.
- d. The Permittee shall discharge no floating solids or foam.
- e. CAAP facilities discharging to a waterbody classified Nutrient Sensitive Waters (NSW) shall use low-phosphorus food [see Certificate of Coverage for receiving-stream classification].
- f. No fish/seafood offal or fish/seafood carcasses shall discharge from any facility covered by this General Permit.
- g. Sampling for Total Suspended Solids, Settleable Solids, Dissolved Oxygen, and Turbidity shall be conducted on an Annual basis for the first two (2) years of the general permit, and on a quarterly basis for the remaining three (3) years of the general permit. New Certificates of

Coverage (CoCs) issued during the permit cycle shall perform quarterly sampling upon issuance of the CoC.

**NOTE:** Special Condition - Section F: This Certificate of Coverage (COC) requires the Permittee to submit to the Division a written plan addressing Operation and Maintenance Best Management Practices (BMPs) in accord with Part I Section F. of this permit. Compliance with Section F shall commence on the anniversary of the effective date, one (1) year from the issuance of the COC.

#### SECTION C. SCHEDULE OF COMPLIANCE

[G.S. 143-215.1(b)]

- 1. The Permittee shall comply with Final Effluent Limitations by the effective date of the Certificate of Coverage.
- 2. Permittee shall at all times provide the planning, scheduling and maintenance necessary to operate the existing facilities in accordance with Part I Section F and Part II. Section C. 2 of this permit.
- 3. The permittee shall at all times manage accumulated solids in such a manner that accumulated solids are not discharged to the receiving stream. Sweeping, raking or otherwise intentionally discharging accumulated solids from raceways or ponds to the receiving stream is prohibited.

#### **SECTION D. APPLICABILITY**

[40 CFR 122; NCGS 143-215]

- 1. This General Permit covers point-source discharges from Concentrated Aquatic Animal Production (CAAP) facilities, seafood/fish packing and rinsing operations, and any other discharge deemed by the Division to be similar.
- 2. A CAAP facility, subject to the NPDES program is defined, but not limited to, a hatchery, fish farm, pond, raceway, net pen, submerged cage system, recirculating system, flow-through system, or similarly structured facility that meets Cold- or Warm-Water definitions and criteria.
  - a. Cold-Water species facilities that meet or exceed all three (3) of the following:
    - (1) produce a minimum 20,000 lbs (9,072 kilos) harvest-weight of aquatic animals per year, and
    - (2) feed more than 5,000 lbs (2,268 kilos) of fish food per calendar month, and
    - (3) discharge more than 30 days per year.
  - b. Warm-Water species facilities that meet or exceed both of the following:
    - (1) produce a minimum 100,000 lbs (45,359 kilos) harvest-weight of aquatic animals per year, and
    - (2) discharge more than 30 days per year.
  - c. The Director may designate **any** cold or warm water aquatic animal production facility a CAAP facility, or may require an individual NPDES permit, upon determining that it is a significant contributor of pollution to the surface waters of North Carolina.

3. This General Permit **does not** apply to seafood/fish processing (requiring regulation under Federal Guidelines), and/or to CAAP facilities deemed to require an individual NPDES permit. Facilities not meeting the minimum requirements of CAAP, as herein defined, are exempt from monitoring and reporting under this permit.

#### SECTION E. DISCHARGE CHARACTERISTICS

[40 CFR 122.41; NCGS 143-215]

#### 1. Activities Covered by This General Permit

This General Permit covers point source discharges originating from seafood packing & rinsing operations as defined by 15A NCAC 02H .0103 (19), and from fish farms and hatcheries defined as CAAP facilities with production levels above specified minimums (see Part I Section D. Applicability), and any other discharges deemed similar by the Director.

This General Permit **specifically excludes** seafood/fish processing deemed process-contact wastegenerating activities (including but not limited to, gutting, cutting, picking, shucking, cooking, steaming, rendering) requiring an individual NPDES permit under 40 CFR 408 Subparts A through AG, or other facility deemed by the Division to require an individual NPDES permit.

#### 2. Geographic Area(s) Covered by This General Permit

This General Permit covers discharges located within the political boundary of the State of North Carolina. (Exception: Discharges located on the Cherokee Indian Tribal Reservation are subject to permitting by the U.S. Environmental Protection Agency.)

#### 3. Receiving Waters

Receiving waters include all surface waters of the State of North Carolina including separate municipal storm sewer systems conveying water to these surface waters.

#### 4. Wastewater Characteristics

Discharges consist of seafood/fish rinse water or wash-down water only, or effluents from CAAP facilities, as defined by this permit. These wastewaters may contain solids as mud, sand or vegetation, fish food and drugs, accumulated during or after the hatchery and recovery of fish or seafood.

#### 5. Prohibited Discharges

- a. Discharges from aquaculture facilities must not cause or contribute to a violation of North Carolina's surface water and wetland standards (15A NCAC subchapter 2B).
- b. The permittee must not discharge into the receiving water body:
  - i. Any fish parts, floating solids, or visible foam beyond trace amounts;
  - ii. Any substance that causes a visible sheen;
  - iii. Any sludge, grit, and accumulated solid residues;
  - iv. Any floating, suspended or submerged matter, including dead fish, in amounts causing nuisance or objectionable condition or that may impair designated uses or violate water quality standards; and
  - v. Any toxic substances, including drugs, pesticides, INADs, or other chemicals, in concentrations that impair designated uses or violate water quality standards.

#### 6. Prohibited Practices

- a. Practices that allow accumulated solids in excess of the limits to be discharged to tribal waters (e.g., the removal of dam boards in raceways or ponds, the cleaning of settling basins, etc.); and
- b. Sweeping, raking, or otherwise intentionally discharging accumulated solids from raceways, ponds, or settling basins into waters of the state.

# <u>SECTION F. SPECIAL CONDITION – BEST MANAGEMENT PRACTICES (BMP) PLAN</u> [NCGS 143-215.1(b)]

Fish food-production facilities defined by this permit as CAAP facilities (see Part I Section D. Applicability), and process greater than 100,000 pounds of product per year, shall develop and maintain a written BMP plan describing how to achieve compliance with EPA 40 CFR Sec. 451.11(a) through (e) or Sec. 451.21(a) through (h). Subject to this Part, the Permittee shall certify in writing to the Division that a BMP Plan has been developed and implemented, and make the plan available to the Division.

This permit also defines narrative conditions to address the potential for CAAP wastewaters to impact the environment such as equipment/component failure and spilled materials (drugs, pesticides, fish carcasses, viscera, excess feed, feed bags, packaging materials, netting and/or other wastes). The following summarizes these narrative limitations to be addressed or referenced in the BMP Plan. More information about BMPs can be found at:

http://water.epa.gov/scitech/wastetech/guide/aquaculture/upload/2006\_05\_03\_guide\_aquaculture\_guida nce\_full-final.pdf.

#### 1. Operation and Maintenance BMP Plan

Within one (1) year of the COC effective date, the CAAP facility owner or designated operator must develop and implement an Operations and Maintenance BMP Plan, as defined herein (in accord with 40 CFR 451.3). Within 90 days of the end of year one (1), certify in writing by submitting a copy of this plan to the Division within 90 days of permit issuance. The BMP plan can be submitted electronically via email to the Division or via mail to:

Division of Water Resources Wastewater Branch 1617 Mail Service Center Raleigh, North Carolina 27699-1617

The BMP Plan shall include regular records keeping; each sample, analysis, measurement, report, or application to remain onsite for a minimum of three (3) years, available for Division inspection. The BMP Plan shall be updated annually and a copy dated and signed by the facility manager, shall be kept onsite and be available for inspection. This BMP Plan shall address, at a minimum, the following:

- a. Solids Control The permittee must ensure adequate solids control procedures to control the discharge of solids and other materials.
  - i. The plan should use efficient feed management and feeding strategies that limit feed input to the minimum amount reasonably necessary to achieve production goals and sustain targeted rates of aquatic animal growth.
  - ii. The plan must identify and implement procedures for routine cleaning of rearing units and offline settling basins.

- iii. The plan should identify procedures for inventorying, grading, and harvesting aquatic animals that minimize discharge of accumulated solids.
- iv. The permittee must identify procedures to remove and dispose of aquatic animal mortalities properly on a regular basis to prevent discharge to the Receiving water body.
- b. Material Storage The permittee must ensure proper storage of drugs, feed, pesticides and hazardous materials. This plan shall include information and procedures related to the prevention of spills and unplanned discharges of chemicals and other hazardous materials.
  - i. The plan shall provide a complete and up-to-date list of all chemicals and other hazardous materials stored at the facility.
  - ii. The plan shall include descriptions of the procedures used to properly prevent, control, and/or treat spills and unplanned discharges of chemicals and other hazardous materials.
  - iii. The plan shall include a description of the supplies and equipment which prevent, control, and/or treat spills and unplanned discharges and a compliance schedule to install any necessary items.
  - iv. The plan shall include the description of the reporting system which shall be used to alert responsible facility management and appropriate legal and regulatory authorities.
  - v. All members of the facilities staff shall have an operational familiarity with the plan.

#### 2. Structural Maintenance

The permittee must ensure that all equipment is operational by:

- a. Routinely inspect rearing and holding units, waste collection and containment systems, and waste collection and containment structures, to identify and promptly repair damage.
- b. Regularly conduct maintenance of rearing and holding units, waste collection and containment systems, and waste collection and containment structures, to ensure their proper function.

#### 3. Training Requirements

The BMP should include procedures to:

- a. Train all relevant personnel in spill prevention and how to respond in the event of a spill to ensure proper clean-up and disposal of spilled materials.
- b. Train personnel on proper operation and cleaning of all equipment and treatment systems.

#### 4. Operational Requirements

The BMP must ensure that:

- a. Water used in the rearing and holding units or hauling trucks that is disinfected with chlorine or other chemicals is treated before it is discharged to the receiving water body.
- b. Treatment equipment used to control the discharge of floating, suspended or submerged matter is cleaned and maintained at a frequency sufficient to prevent overflow or bypass of the treatment unit by floating, suspended, or submerged matter.
- c. Procedures are implemented to prevent fish from entering quiescent zones, full-flow and off-line settling basins. Fish that have entered quiescent zones or basins must be removed as soon as possible.

- d. Procedures are identified and implemented to collect, store, and dispose of wastes, including biological wastes, such as fish mortalities and other solid processing aquaculture wastes.
- e. All drugs and pesticides are administered in accordance with applicable label directions [Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) or Food and Drug Administration (FDA)], except under the following conditions, both of which must be reported to the EPA in accordance with Part II. A. 1 Use of Drugs, Pesticides, and Other Chemicals:
  - i. Participation in Investigational New Animal Drug (INAD) studies, using established protocols; or
  - ii. Extra-Label drug use, as prescribed by a veterinarian in writing.

#### 5. Reporting Requirements

As a means to prevent adverse impacts in the receiving stream, the Division requires reporting of facility damage, material spills, voluntary or involuntary drug testing, and drug use. The Division expects facilities to implement proper storage for these products, and implement procedures for containing, cleaning and disposing of spilled material. CAAP facilities shall make oral and written reports to the Division (See 40 CFR 451.3), as follows.

- a. **Spills** the Permittee shall alert the Division to any loss of hazardous materials such as drugs, pesticides, or feed with potential impact to the environment. The Permittee shall make an oral report to the Division within 24 hours of the spill's occurrence followed by a written report within 5 days. The report shall identify the material spilled and estimate the amount (40 CFR 451.3). Upon receiving the oral report, the Division may on a case-by-case basis defer the requirement for a written report.
- b. **Damage or Breach of Containment Structures** the Permittee shall alert the Division to any damage to containment structures such as berms, containers, ponds, or nets that results in a loss of materials hazardous to the receiving stream. The Permittee shall make an oral report to the Division within 24 hours of the spill's occurrence followed by a written report within 5 days. The report shall identify the material spilled and estimate the amount spilled (40 CFR 451.3). Upon receiving the oral report, the Division may on a case-by-case basis defer the requirement for a written report.
- c. Participation in INAD Testing and the Use of Extralabel Drugs CAAP facilities must notify the Division in writing within 5 days of volunteering to participate in investigational new animal drug (INAD) testing, in accordance with 40 CFR 451.3. The Permittee shall report the intended use of INADs and any extralabel drugs both orally and in writing. Based on the oral report, the Division may implement site-specific action, as warranted. The written report shall identify and confirm the use of the drug and provide more complete data for future analysis and measures control.
- d. **Impact to receiving waters** the Permittee shall make an oral report to the Division as soon as, but no later than 24 hours after, observing any impact to receiving waters, including but not limited to: visible impacts monitored under Part I Section A. General Condition G. Upon receiving the oral report, the Division may on a case-by-case basis defer the requirement for a written report. Additional monitoring, review of operational conditions, implementation of remedial measures, and auditing of BMPs may be required.

**INAD** or Extralabel Drug Reporting Exception: If the Division has already approved a Permittee's use of a specific INAD or extralabel drug, additional approval to treat another species, or to treat another disease using this INAD or extra label drug, is not necessary provided that the

Permittee maintain similar treatment conditions and restrict the dosage not-to-exceed the approved dosage (See 40 CFR 451.3).

#### SECTION G. NOTICE OF INTENT

[40 CFR 122.41(b)]

Individuals intending to obtain coverage under this General Permit shall submit a Notice of Intent (NOI) and an Application for Certificate of Coverage (COC). A current version of these documents can be obtained by contacting the Water Quality Permitting Section at 919-707-9000 or may be downloaded from the internet at https://deq.nc.gov/about/divisions/water-resources/water-quality-permitting/npdes-wastewater/npdes-permitting-process-1. NOIs must be signed and submitted to:

Division of Water Resources Water Quality Permitting Section-NPDES 1617 Mail Service Center Raleigh, NC 27699-1617

Applicants who have submitted an NOI are not authorized to discharge until the Division issues a Certificate of Coverage. In general, the NOI shall include the following information:

- 1. The mailing address and telephone number for the owner and/or operator.
- 2. The facility name, address, and telephone number where the discharge will occur.
- 3. The permit number of any NPDES permit(s) for any discharge(s) from the site.
- 4. A description of the discharge, including the number of discharge points, the volume of discharge, the frequency of discharge and any treatment methods applied prior to discharge.
- 5. The name of the receiving waters and the stream classification (if known).
- 6. An analysis of non-discharge alternatives, including connection to a regional sewer collection system, subsurface disposal, and spray irrigation.
- 7. A 7.5-minute series USGS topographic map clearly indicating the discharge location.
- 8. Final plans and specifications for the treatment system including all major components (if applicable).
- 9. Certification that the information contained in the NOI is true, complete, and accurate.

#### APPENDIX A. FEED CONVERSION RATIOS LOG

#### FLOW-THROUGH, RECIRCULATING, AND NET PEN SYSTEMS

**Instructions**: This example form may be used to keep track of feeding and to calculate/track feed conversion ratios (FCR). The first row is an example row. The FCR is calculated with the following equation:

$$FCR = \frac{Dry \ weight \ of \ feed \ applied}{Wet \ weight \ of \ fish \ gained}$$

Date (Start Date) (End Date)	Description of Group	Total Feed Amounts (Estimate)	Weights of Animals (Start Weight) (End Weight)	Weight Gained	Calculated FCR
3/20/2004	Brook trout stockers for	5,275 lbs	100 lbs	4,700 lbs	1.12
10/21/2004	Potomac River		4,800 lbs		